

# VIRGINIA

## *Economic Indicators*

### 4th Quarter 2009 Supplement


Volume 41, Number 5

For those who are interested in studying the business cycle, the *Virginia Economic Indicators* publication is designed to depict the movement of the key economic indicator series readily available in Virginia.

From time to time, new series will be added to this report as the data becomes available and is collected and tested. Also, series presently provided, if necessary, may be discontinued. Beginning with First Quarter 2010, several series of Current Employment Statistics (CES) data will be added.

This supplement includes the 2008 and 2009 data for the new series. Also included are the historical graphs for the new series covering the months from January 1999 to December 2009.

## Goods Producing Employment\*

	Mining and Logging Employment (Thousands)		Construction Employment (Thousands)		Manufacturing Employment (Thousands)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
2008						
January	10.6	10.7	223.7	232.5	270.2	271.7
February	10.9	11.0	222.0	231.7	267.2	269.1
March	10.8	10.9	223.9	229.9	265.7	267.3
April	10.9	11.1	226.2	228.7	267.9	269.2
May	11.0	11.1	226.8	226.4	266.6	267.5
June	11.1	11.1	228.6	224.6	266.8	266.0
July	11.2	11.1	228.3	222.8	265.3	265.0
August	11.2	11.1	227.1	220.9	264.9	263.9
September	11.3	11.3	223.8	219.1	263.6	262.4
October	11.5	11.4	220.4	217.4	261.8	260.8
November	11.5	11.4	214.9	213.1	259.9	258.4
December	11.4	11.2	209.6	209.1	257.9	256.4
2009						
January	10.8	10.9	195.4	203.2	250.2	251.6
February	10.5	10.6	190.8	199.3	245.4	247.3
March	10.4	10.5	190.2	195.4	243.2	244.8
April	10.2	10.4	190.5	192.7	240.4	241.7
May	10.1	10.2	191.0	190.7	238.7	239.7
June	10.1	10.1	192.1	188.8	238.3	237.6
July	10.0	9.9	192.8	188.2	237.1	236.7
August	10.1	10.0	192.0	186.7	236.0	235.1
September	10.1	10.1	189.4	185.4	235.5	234.5
October	10.1	10.0	188.4	185.8	234.7	233.8
November	10.1	10.0	187.6	186.0	234.9	233.6
December	10.0	9.9	185.5	185.0	233.6	232.3

## Trade Employment\*

	Wholesale Trade Employment (Thousands)	
	Unadjusted	Adjusted
2008		
January	119.6	120.6
February	119.7	120.6
March	119.7	120.4
April	120.0	120.3
May	120.4	120.2
June	120.6	120.0
July	120.3	120.0
August	120.1	119.5
September	119.2	119.1
October	119.0	118.7
November	118.1	117.9
December	117.6	117.1
2009		
January	115.4	116.4
February	114.7	115.5
March	114.2	114.8
April	113.9	114.2
May	113.9	113.7
June	113.5	112.9
July	112.7	112.4
August	112.6	112.1
September	111.8	111.7
October	112.0	111.7
November	110.6	110.5
December	109.8	109.4

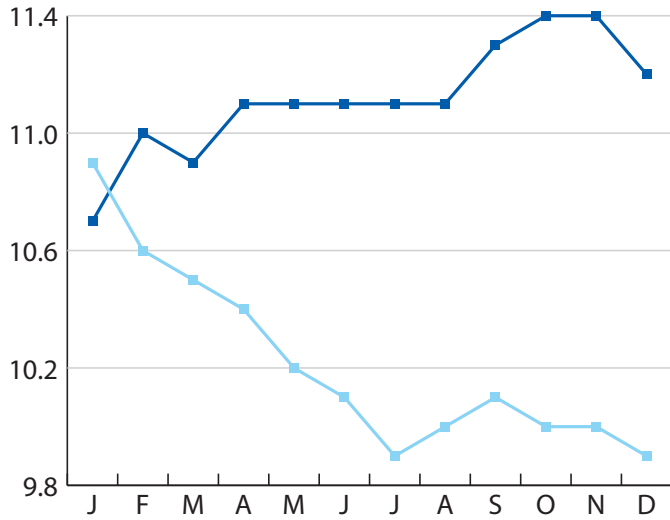
Retail Trade Employment (Thousands)	
Unadjusted	Adjusted
425.9	427.8
415.8	426.6
418.1	426.5
415.8	424.9
418.5	422.3
421.0	422.0
420.0	421.6
419.2	420.7
417.1	419.2
417.4	415.7
426.7	411.3
431.5	409.7
403.5	405.3
394.4	404.8
392.8	400.7
392.3	401.0
397.3	401.0
399.0	400.0
396.4	397.9
395.8	397.2
394.6	396.5
396.7	395.2
405.4	391.0
411.0	390.5

\* These series have been adjusted to First Quarter 2009 benchmarks.

## Goods Producing Employment

2008 2009

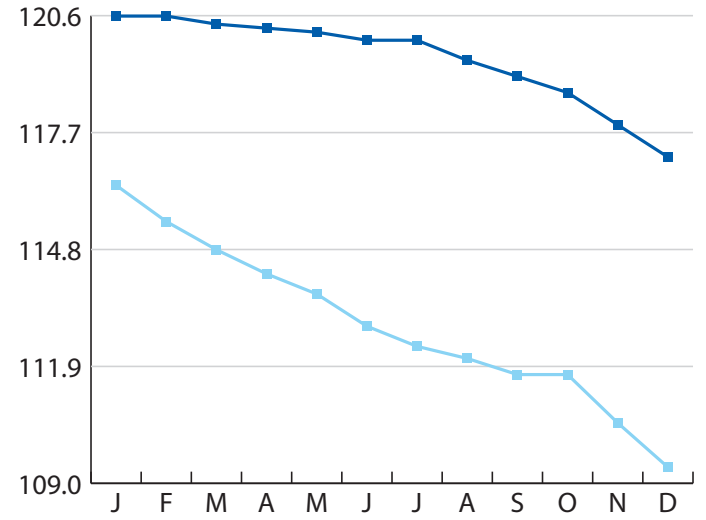
### Mining and Logging Employment (Thousands)



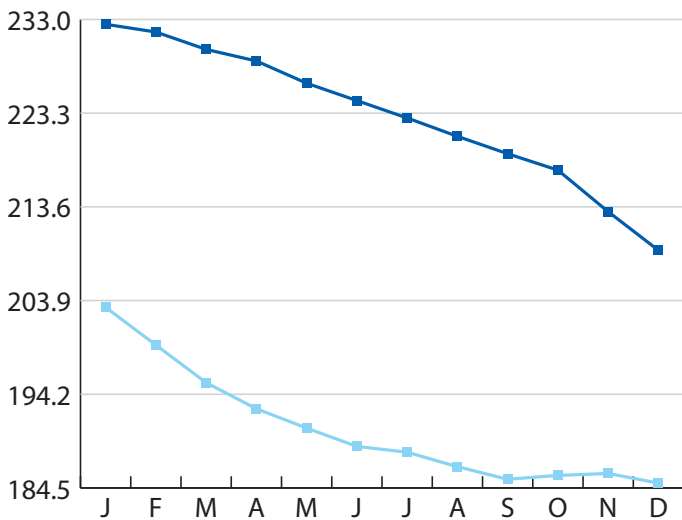
## Trade Employment

2008 2009

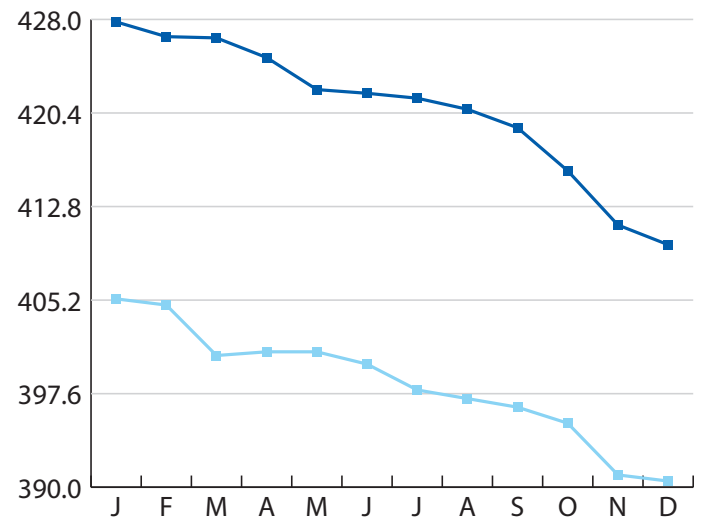
### Wholesale Trade Employment (Thousands)



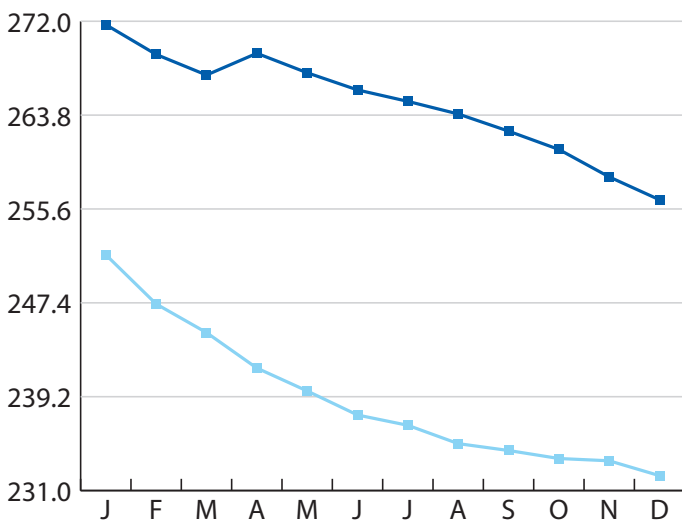
### Construction Employment (Thousands)




### Retail Trade Employment (Thousands)




### Manufacturing Employment (Thousands)



## Transportation, Information, and Finance Employment\*

	Transportation, Warehousing, and Utilities Employment (Thousands)		Information Employment (Thousands)		Finance Employment (Thousands)	
	Unadjusted	Adjusted	Unadjusted	Adjusted	Unadjusted	Adjusted
<b>2008</b>						
January	117.9	119.5	88.7	89.2	189.3	191.4
February	117.8	119.9	88.7	88.8	189.5	191.3
March	117.5	119.2	88.5	88.5	189.6	190.5
April	118.4	120.1	88.1	88.5	189.1	189.9
May	119.1	119.8	88.2	88.0	189.1	189.0
June	119.9	119.6	88.4	87.8	190.5	188.6
July	119.7	119.3	88.0	87.5	191.1	188.8
August	120.1	119.5	87.5	87.3	190.1	187.9
September	119.4	118.6	86.4	86.6	187.7	187.5
October	118.4	117.8	85.6	86.0	186.7	187.2
November	119.0	117.5	85.4	85.5	185.5	186.4
December	120.6	117.1	84.9	84.9	185.6	185.5
<b>2009</b>						
January	114.4	116.0	84.0	84.4	182.1	184.1
February	113.2	115.2	83.8	83.8	181.1	182.8
March	112.7	114.3	83.1	83.2	181.1	181.9
April	111.8	113.4	82.1	82.4	181.1	181.9
May	112.5	113.2	81.9	81.7	180.8	180.8
June	112.7	112.4	81.8	81.2	181.8	180.0
July	112.3	112.0	81.1	80.6	181.6	179.4
August	112.0	111.5	80.1	79.9	181.4	179.4
September	112.1	111.3	79.1	79.3	179.0	178.9
October	110.5	110.0	78.8	79.1	178.4	178.8
November	111.9	110.5	78.2	78.3	177.5	178.4
December	110.4	107.3	78.0	78.0	177.7	177.6

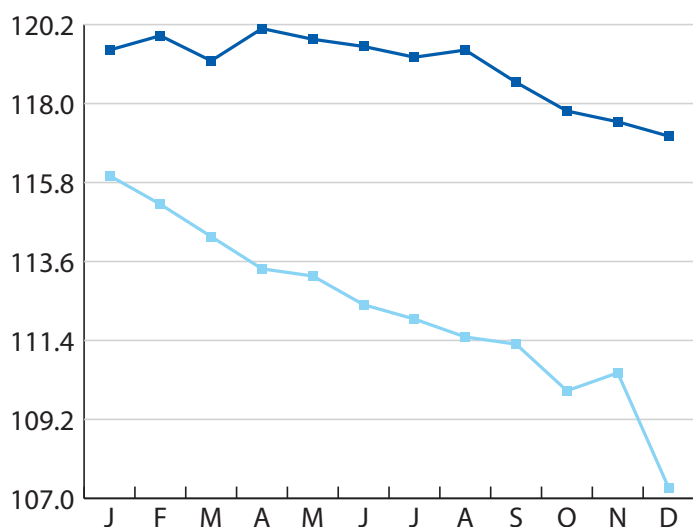
## Service Employment\*

	Professional and Business Services Employment (Thousands)		Private Education and Health Services Employment (Thousands)	
	Unadjusted	Adjusted	Unadjusted	Adjusted
<b>2008</b>				
January	644.9	655.1	430.3	430.6
February	647.3	655.5	436.1	433.9
March	650.3	654.7	437.4	434.4
April	656.4	658.5	441.9	437.6
May	657.0	658.9	442.7	437.9
June	662.5	658.8	441.6	439.4
July	663.2	659.1	423.7	441.8
August	665.6	659.5	424.5	442.5
September	661.1	658.9	445.2	442.4
October	662.0	657.6	448.7	443.8
November	658.3	655.0	449.8	443.7
December	655.8	652.6	450.4	444.3
<b>2009</b>				
January	640.3	650.3	445.5	445.9
February	639.0	647.2	447.5	445.4
March	639.2	643.6	448.9	445.9
April	638.0	640.1	451.0	446.6
May	636.4	638.3	452.7	447.8
June	639.3	635.9	450.7	448.4
July	639.1	635.3	434.3	452.7
August	639.9	634.1	433.9	452.2
September	635.7	633.8	452.8	450.2
October	641.1	636.9	457.3	452.4
November	638.6	635.5	459.8	453.8
December	638.6	635.7	460.5	454.5

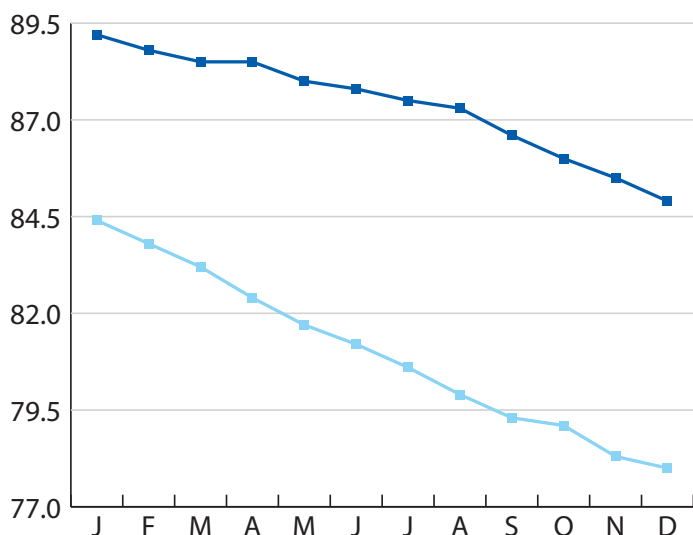
\*These series have been adjusted to First Quarter 2009 benchmarks.

## Transportation, Information, and Finance Employment

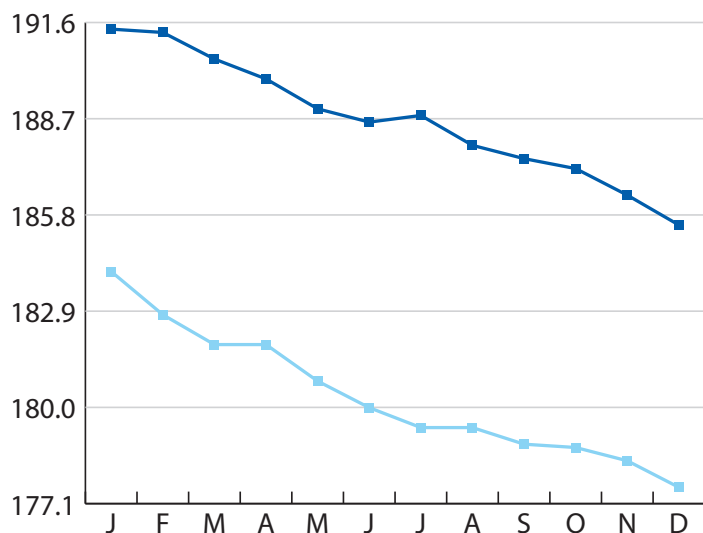
Transportation, Warehousing, and Utilities Employment (Thousands)



Information Employment (Thousands)

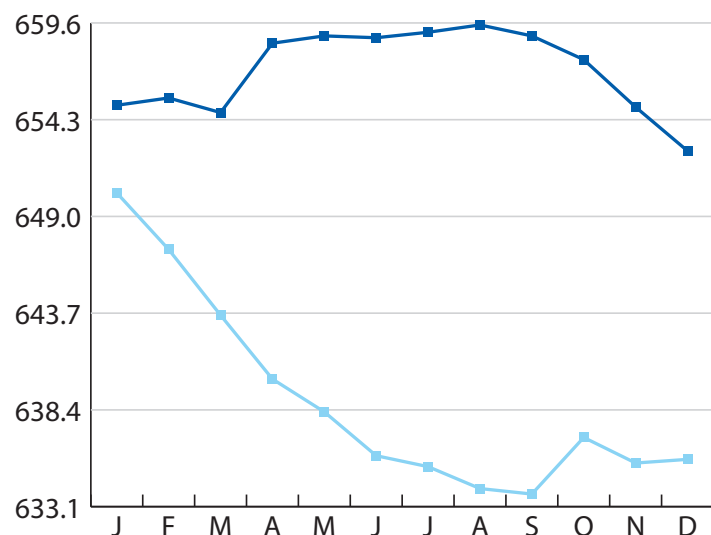


Finance Employment (Thousands)

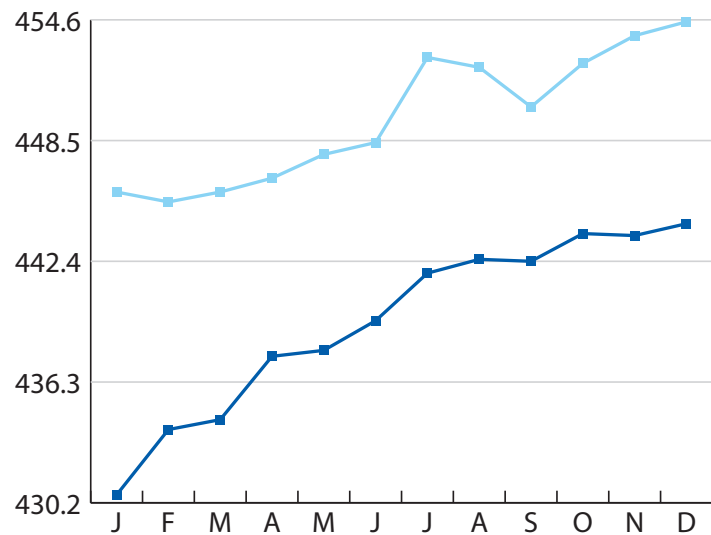


## Service Employment

Professional and Business Services Employment (Thousands)




Private Education and Health Services Employment (Thousands)






## Service Employment (Continued)\*

	Leisure and Hospitality Services Employment (Thousands)	
	Unadjusted	Adjusted
<b>2008</b>		
January	327.2	350.2
February	329.7	350.8
March	339.2	350.7
April	349.7	351.7
May	362.1	351.8
June	372.7	350.0
July	372.9	350.2
August	369.6	349.0
September	354.3	348.0
October	344.6	348.2
November	336.2	346.2
December	333.6	345.3
<b>2009</b>		
January	320.2	342.6
February	321.9	342.4
March	328.4	339.4
April	339.7	341.6
May	354.6	344.5
June	364.0	341.8
July	363.7	341.5
August	360.6	340.5
September	347.8	341.7
October	333.1	336.6
November	324.9	334.8
December	321.3	332.7

Miscellaneous Services Employment (Thousands)	
Unadjusted	Adjusted
185.1	187.5
186.6	188.3
187.2	187.9
188.9	189.0
190.0	189.1
191.0	188.9
191.0	188.9
190.7	189.4
188.7	189.1
189.7	190.0
188.5	189.0
188.2	188.4
185.0	187.4
185.4	187.1
185.9	186.6
186.3	186.4
187.0	186.1
188.4	186.3
188.4	186.4
187.4	186.1
185.4	185.9
186.0	186.3
185.9	186.5
189.5	189.7

## Government Employment\*

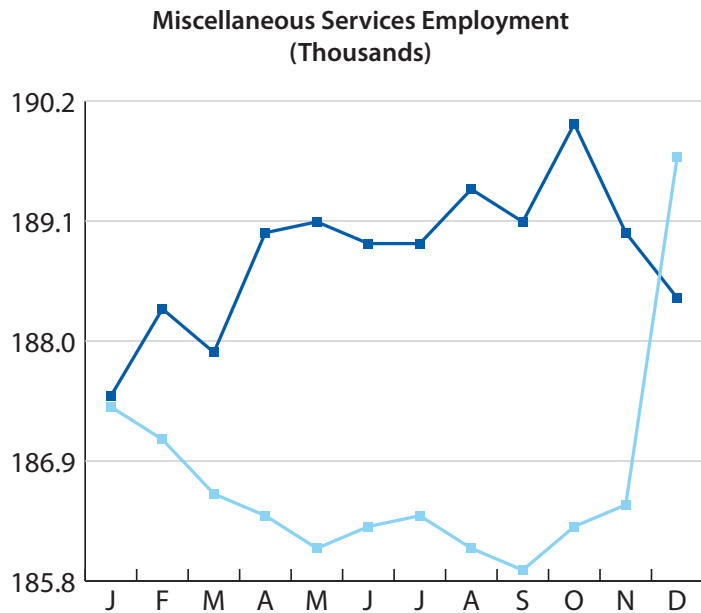
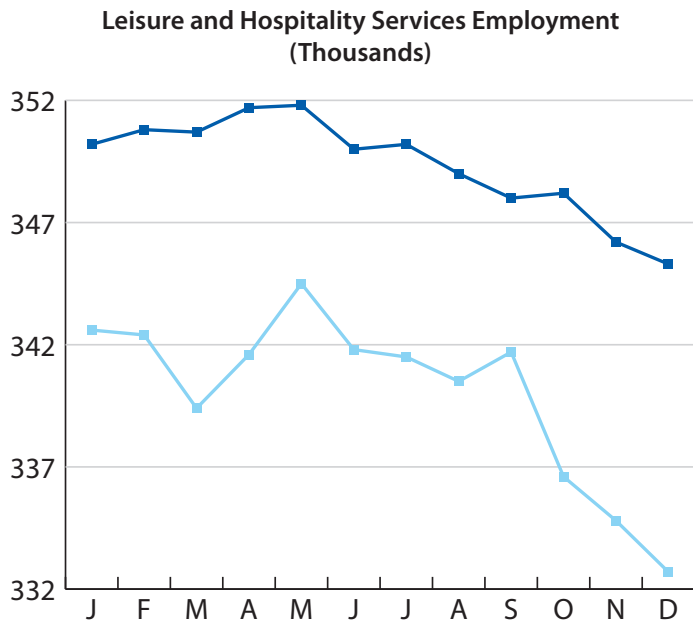
	Federal Government Employment (Thousands)	
	Unadjusted	Adjusted
<b>2008</b>		
January	156.7	157.1
February	156.7	157.9
March	156.9	158.0
April	157.7	158.5
May	159.0	159.4
June	160.3	159.8
July	162.2	160.7
August	162.3	161.1
September	161.2	161.5
October	161.5	161.5
November	161.9	161.6
December	162.6	162.1
<b>2009</b>		
January	162.3	162.7
February	162.0	163.2
March	162.2	163.3
April	166.6	167.5
May	166.7	167.0
June	166.2	165.7
July	167.3	165.7
August	168.4	167.2
September	167.1	167.5
October	168.5	168.5
November	168.7	168.4
December	168.9	168.4

State Government Employment (Thousands)	
Unadjusted	Adjusted
149.8	154.1
156.6	154.1
157.8	154.1
159.1	154.2
152.7	153.0
148.2	152.7
145.2	152.6
146.8	153.3
156.0	153.8
158.9	155.0
158.9	155.0
158.0	156.0
148.9	153.1
155.2	152.6
157.0	153.3
156.4	151.6
152.3	152.7
148.6	153.2
145.0	152.5
146.8	153.4
156.5	154.3
158.2	154.2
158.8	154.9
158.2	156.2

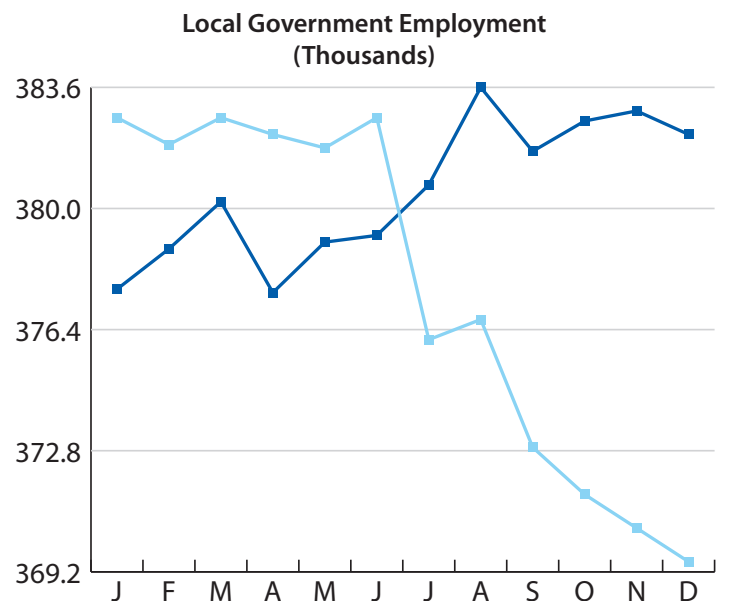
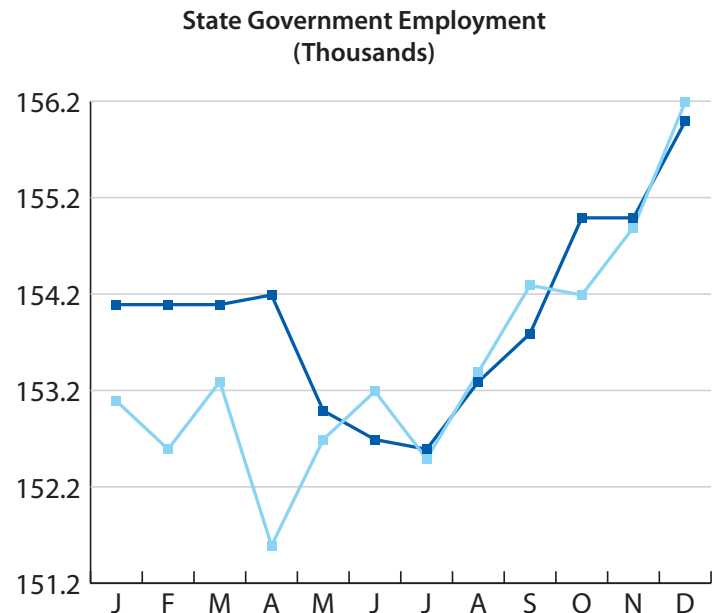
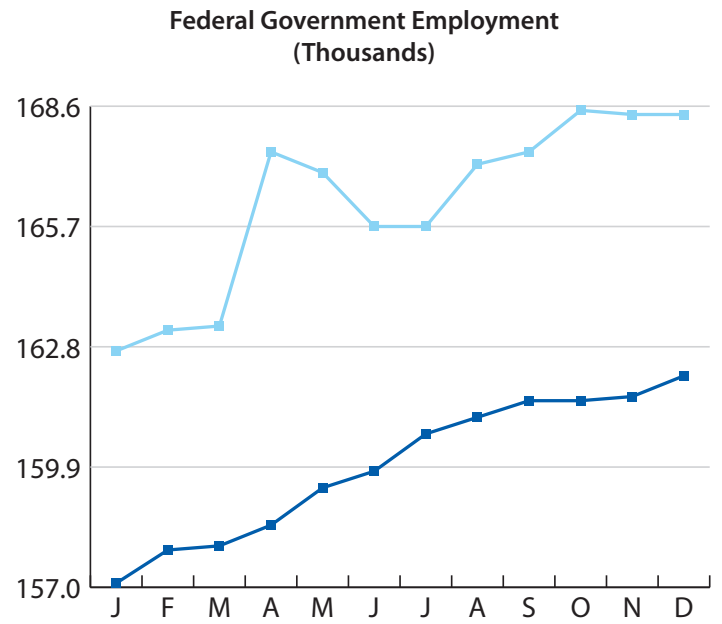
Local Government Employment (Thousands)	
Unadjusted	Adjusted
379.9	377.6
383.5	378.8
386.4	380.2
382.7	377.5
386.9	379.0
387.9	379.2
362.9	380.7
360.2	383.6
372.3	381.7
384.3	382.6
390.1	382.9
388.4	382.2
385.0	382.7
386.7	381.9
389.0	382.7
387.4	382.2
389.8	381.8
391.5	382.7
358.6	376.1
353.8	376.7
363.6	372.9
373.0	371.5
377.3	370.5
375.2	369.5

\* These series have been adjusted to First Quarter 2009 benchmarks.

## Service Employment (Continued)



## Government Employment



# HISTORICAL SUMMARY

## PERFORMANCE OF INDICATORS OVER THE BUSINESS CYCLE

For those interested in studying the business cycle in Virginia, this publication includes several of the economic time series for which data is readily available on a monthly basis. From time to time, new series will be added and, if necessary, others presently included will be discontinued.

## BUSINESS CYCLE TURNING POINTS

The beginning of a recession is defined as the month when aggregate economic activity in the U.S. reaches a cyclical high, from which it begins to turn down, and the end as the month when it reaches a cyclical low, from which it begins to turn up. On November 26, 2001, the National Bureau of Economic Research (NBER) announced a recession had begun in March 2001. On July 17, 2003, NBER announced the recession ended in November 2001. The NBER on December 1, 2008, announced a recession had begun in December 2007.

## SEASONAL ADJUSTMENT

To correlate changes in a time series and changes in the business cycle, it is desirable to eliminate, insofar as possible, the effect of irrelevant factors from the data comprising the series. All series currently published in the *Virginia Economic Indicators* have been adjusted to minimize regular seasonal fluctuations in the data in order to show only activity related to the business cycle.

## HISTORICAL GRAPHS

Historical graphs are published in the back of the fourth quarter issue for each year.

## DATA SOURCE

The data source for all series in this supplement is the Virginia Employment Commission (VEC).



# HISTORICAL GRAPHS

## ***MONTHS OF CYCLICAL DOMINANCE (MCD)***

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After seasonal adjustment, there often remains a significant degree of purely random change—the effect of which can be minimized with a moving average equal in length to the MCD of the series. The MCD is an estimate of the length of the moving average which will reveal the cyclical pattern among the welter of random fluctuations in the data—the greater the MCD the more random and less cyclically significant are monthly changes in the series. Charts of historical data in this publication represent seasonally adjusted figures which have been averaged according to the MCD of each series.

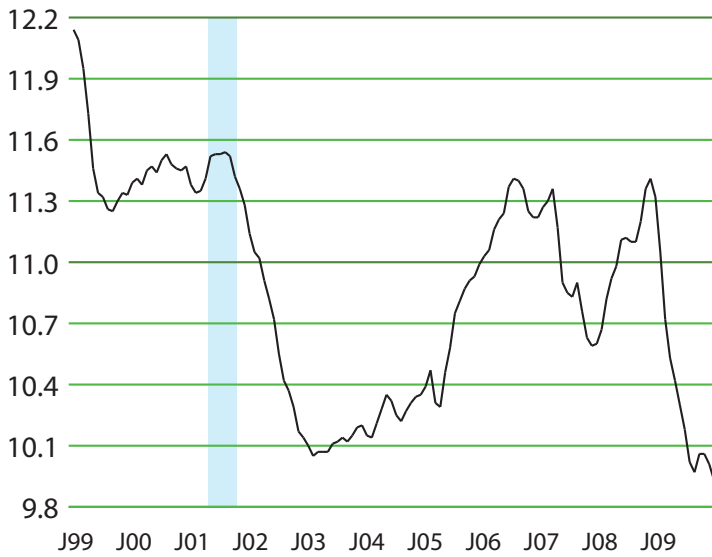
Note:

<sup>†</sup>*Starting with January 2001 data, manufacturing series are estimated using the NAICS codes instead of the old SIC codes. The most important change is that publishers, primarily newspapers, are no longer included in manufacturing, but are part of the new information sector.*

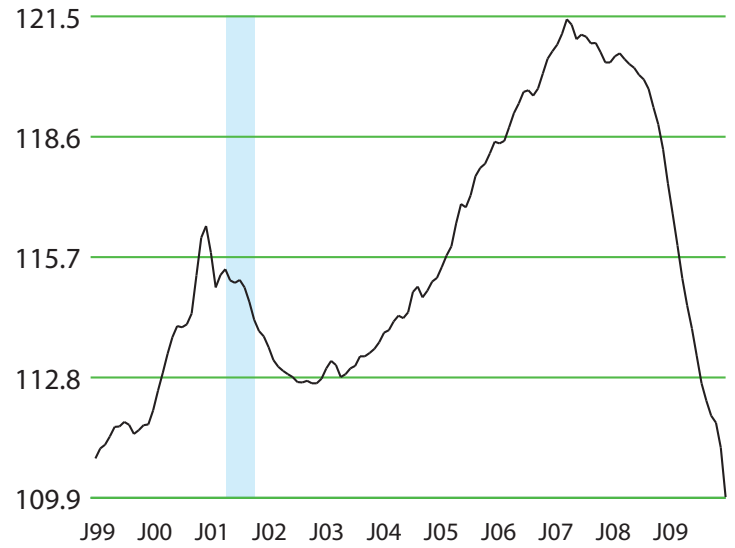


The shaded area on the graphs represents the Mar.-Nov. 2001 recession.

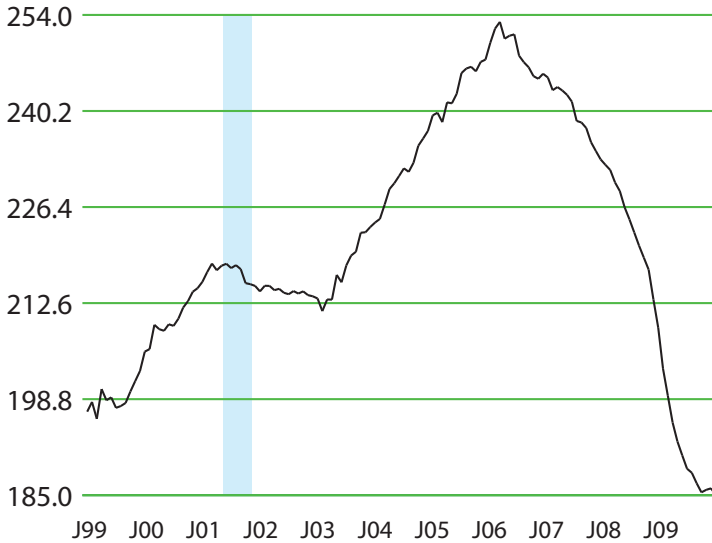
**Mining and Logging Employment\***  
(MCD=2)



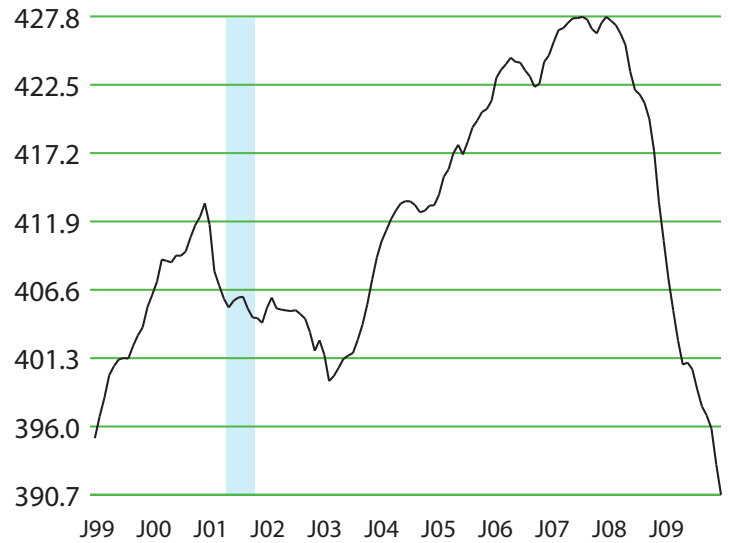
**Wholesale Trade Employment\***  
(MCD=2)



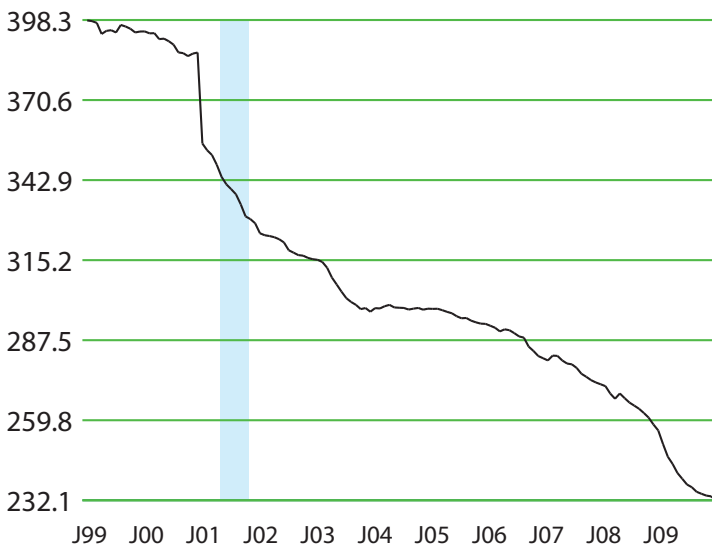
**Construction Employment\***  
(MCD=1)



**Retail Trade Employment\***  
(MCD=2)



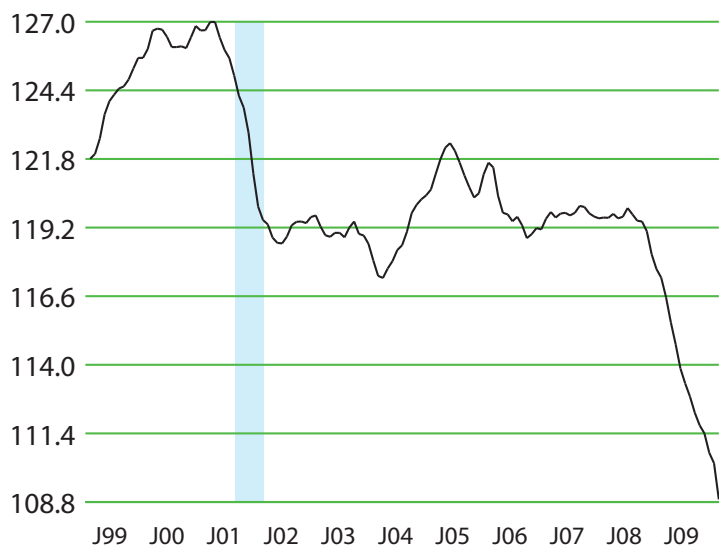
**Manufacturing Employment\*†**  
(MCD=1)



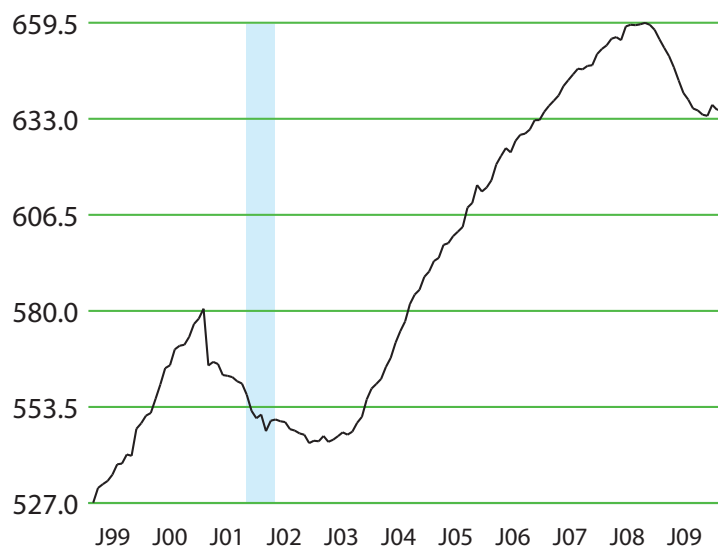
Note: All Numbers in Thousands  
\* MCD Moving Average

†See note on page 8

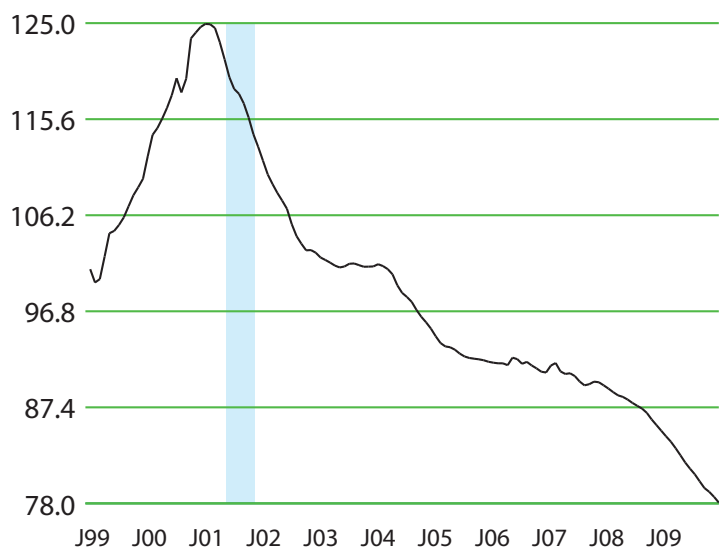
**Transportation, Warehousing, and Utilities Employment\***  
(MCD=2)



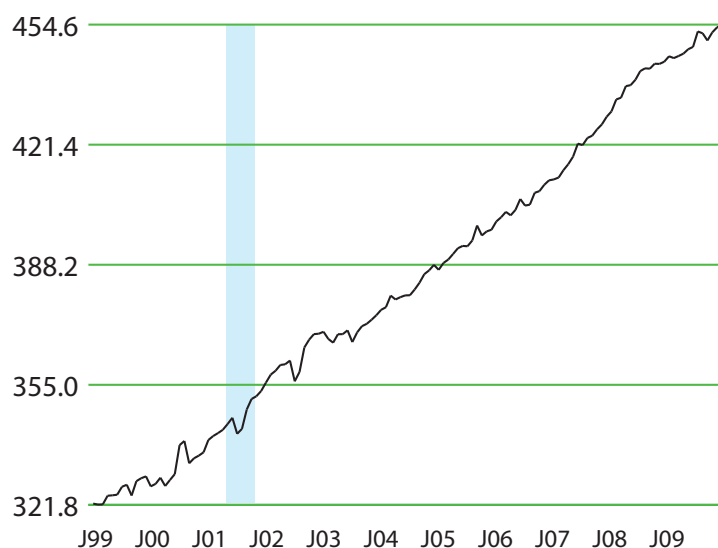
**Professional and Business Services Employment\***  
(MCD=1)



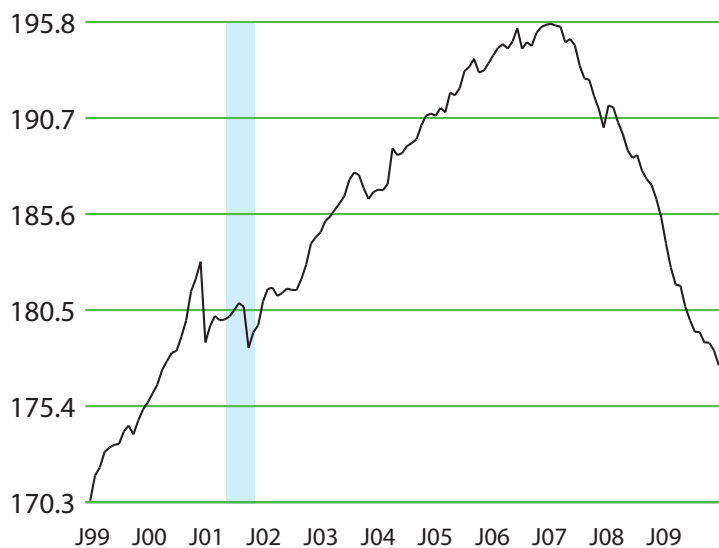
**Information Employment\***  
(MCD=2)



**Private Education and Health Services Employment\***  
(MCD=1)

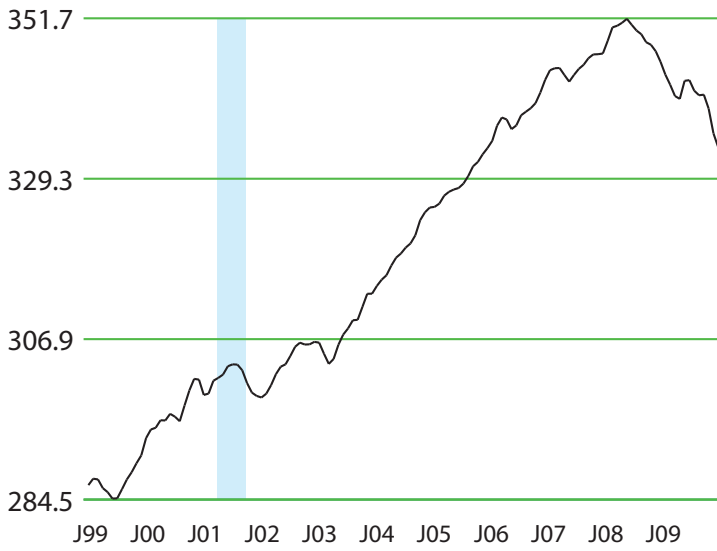


**Finance Employment\***  
(MCD=1)

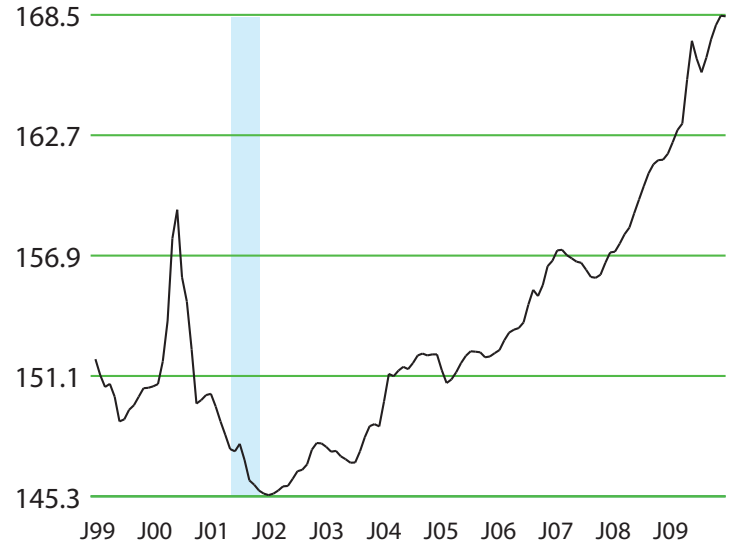


Note: All Numbers in Thousands  
\* MCD Moving Average

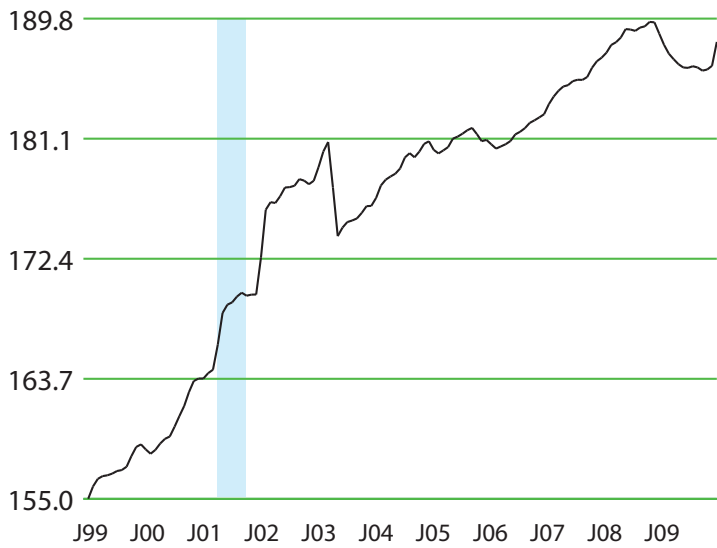
**Leisure and Hospitality Services Employment\***  
(MCD=2)



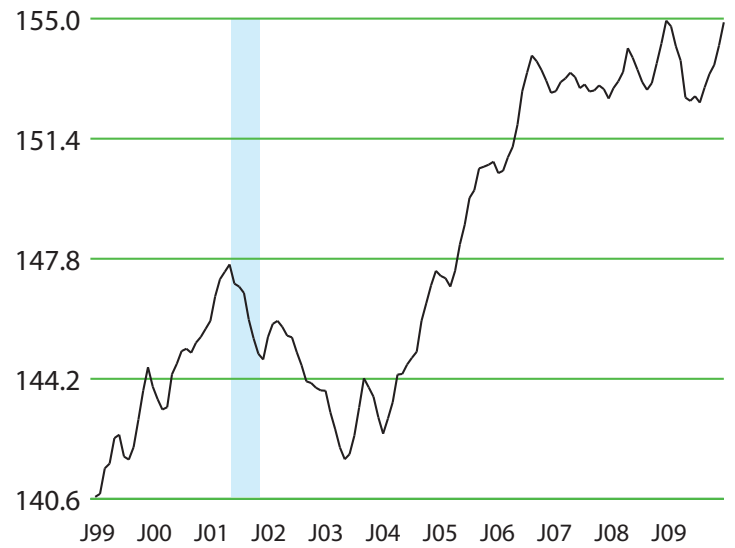
**Federal Government Employment\***  
(MCD=2)



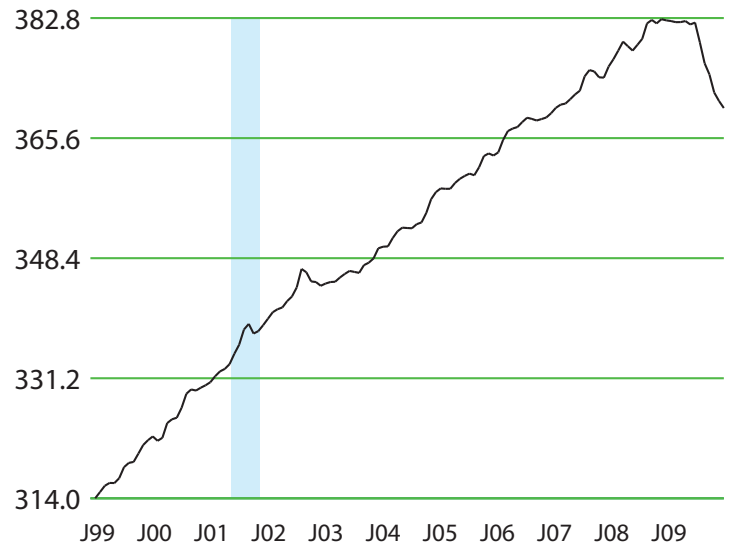
**Miscellaneous Services Employment\***  
(MCD=2)



**State Government Employment\***  
(MCD=4)



**Local Government Employment\***  
(MCD=2)



Note: All Numbers in Thousands  
\* MCD Moving Average